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09/886,534	06/20/2001	Nam Mo Ku	ORIEN20.001AUS	6396

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EXAMINER

CIRIC, LJILJANA V

ART UNIT	PAPER NUMBER
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3753

DATE MAILED: 01/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/886,534

Applicant(s)

Ku

Examiner

Ljiljana V. Ciric

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Oct 29, 2003
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-20 is/are pending in the application.
- 4a) Of the above, claim(s) none is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6 is/are allowed.
- 6) ☒ Claim(s) 7-10 and 12-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Oct 29, 2003 is/are a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). --
- a) ☒ All b) ☐ Some* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Attachment A 2VC 12-31-03

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DETAILED ACTION

Response to Amendment

1. This Office action is in response to the amendment and arguments filed on October 29, 2003.
2. Claims 1 through 10, 12, and 13 remain in the application as amended, while claims 14 through 20 are new.

Response to Arguments

3. Applicant's arguments filed on October 29, 2003 have been fully considered, but have generally not been found persuasive.

In general, the examiner hereby wishes to reiterate that the claims in a pending application should be given their *broadest* reasonable interpretation. See In re Person, 181 USPQ 641 (CCPA 1974). Applicant's arguments, as before, tend to be based on an overly narrow interpretation of the prior art. Similarly, the marked-up "air flow directions" as presented in Exhibit A by applicant inaccurately portray the complex airflow patterns of the prior art in an oversimplified manner.

Upon reconsideration and in view of applicant's amendments to the claims, the previously cited rejection of claims 7 through 9, 12, and 13 under 35 U.S.C. 102(b) as being anticipated by *Takesita et al.* have been obviated. In particular, *Takesita et al.* does not, for example, disclose nor suggest "a pair of side blowing passages configured to allow fluid communication between the

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second chamber and the third chamber” as recited by base claim 7 as amended. The examiner nevertheless wishes to point out that at least some of applicant’s arguments relating to the *Takesita et al.* reference were not in of themselves found to be persuasive per se because, for example, this reference indeed *does* show the second air flow direction as being substantially perpendicular to the first air flow direction, as previously shown by the examiner in Attachment A to Paper No. 9.

Applicant’s arguments with respect to the previously cited rejection of claims 7 through 10, 12, and 13 under 35 U.S.C. 102 (b) as being anticipated by *Bendell* have not been found persuasive.

Applicant argues that “the reference fails to teach or disclose each and every element of the rejected claims, especially ‘a second direction substantially perpendicular to the first direction’.” Contrary to applicant’s assertion, however, *Bendell* indeed does disclose “the second chamber configured to pass a second air flow through the second heat exchanger in a second direction substantially perpendicular to the first direction” as shown via the flow arrows in Figure 2 of *Bendell*. See Attachment A to this Office action for a clarifying mark-up. Applicant’s marked-up “air flow directions” as presented in Exhibit A are not merely an inaccurate oversimplification of the airflow through the *Bendell* apparatus, but furthermore simply ignore the airflow arrows clearly shown in Figure 2 of the *Bendell* reference.

Applicant’s arguments relying on the new limitations in the claims of the instant invention relating to the side blowing passages extending along opposite sides of the second heat exchanger

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"in a third direction substantially opposite to the second direction" are not clearly explained by applicant and are not clearly understood because the italicized portion of these limitations is generally not comprehensible and thus indefinite, as pointed out in greater detail below.

Applicant's arguments thus fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Applicant's arguments thus also do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

Drawings

4. The corrected or substitute drawings were received on October 29, 2003. These drawings are approved.

Claim Rejections - 35 U.S.C. § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 7 through 14, 17, 19, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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The limitation “a pair of *side* blowing passages” as newly recited in base claim 7 does not clearly define the scope of protection sought and thus renders indefinite claim 7 and claims 8 through 14 depending therefrom. As used in the claim, it is not clear exactly how the term “side” is intended to qualify the configuration of the pair of blowing passages. Is this term intended to signify that the blowing passages are located at one or more sides of another element, and if so, which one(s)? Or is the term intended to signify that the pair of blowing passages are located side by side? Or is the term intended to merely signify that the air blown through these passages flows along or out the side or sides of some unidentified element(s)?

The term “approximate” in claim 17 is a relative term which renders the claim indefinite. The term “approximate” is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Thus, as used to qualify the radius of the second circular curve, this term renders the same indeterminate and the claim indefinite.

The limitations “in a third direction *substantially opposite to* the second direction” as cited in new claims 14, 19, and 20 is similarly not clear as written, rendering these claims indefinite with regard to the scope of protection sought. If an air flow passage is recited as extending in a second direction, and if two additional passages are recited as extending in a third direction “substantially opposite” to the second direction, is this intended to signify that two additional passages are disposed so as to be collinear with or parallel to or at right angles to the first air flow passage?

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Claim Rejections - 35 U.S.C. § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

NOTE: The above reflects changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002.

8. As best can be understood in view of the indefiniteness of the claims, claims 7 through 10, 12, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by *Bendell*.

Bendell [especially Figure 2] discloses a vehicular air conditioner 1 essentially as claimed, including, for example: a housing 2 containing three chambers; a first heat exchanger 14 located in the first chamber, wherein the first chamber is configured to pass a first air flow through the first heat exchanger 14 in a first direction as shown by the solid arrows corresponding thereto; a second heat exchanger 12 located in the second chamber, wherein the second chamber is configured to pass a second air flow through the second heat exchanger 12 in a second direction substantially perpendicular to the first direction as shown by at least some the solid arrows

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corresponding thereto; a third chamber configured to receive the heat exchanged air from at least one of the first and second chambers and to discharge the same from the air conditioner; a partition member corresponding to inner housing 24 having at least one arcuately curved surface and defining two openings corresponding respectively to the inlet opening 36 between the first and second chambers and to, for example, the inlet of duct passage 32 between the first and third chambers, the partition member or inner housing 24 together with the walls of the housing or casing 2 defining the three chambers, at least a pair of "side" passages configured to allow communication between the second chamber and the third chamber, this pair of "side" passages corresponding to any two of the passages between air-directing elements 39 disposed in the air outlet 39 from the second chamber on the upper side of the second heat exchanger 12 (i.e., hence the passages being "side" passages as broadly interpreted as required); a mix door readable on the combination of control flap 37 as connected to flap body 35 via linkage 41, this combination mix door being thus configured to adjust the degree of opening of both of the first and second openings defined by the partition member or inner housing 24, the door having an arcuately curved surface constituting the arcuate surface of control flap 37, this arcuately curved surface of control flap 37 in turn corresponding to the curved surface of partition member or inner housing 24 at the air inlet opening 36 [see phantom representation of the door or control flap 37 in the closed position as shown in Figure 2]; and, a conduit or connection tube 13 connected to the second heat exchanger 12 through a hole in the wall of the casing or housing 2 defined by the second chamber as shown in Figure 2. Also see Attachment A to this Office action.

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Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

The reference thus reads on the claims.

9. As best can be understood in view of the indefiniteness of claim 17, claims 15 through 18 are rejected under 35 U.S.C. 102(e) as being anticipated by *Sano et al* (filed April 4, 2000).

Sano et al. [especially Figures 16 through 26] discloses an air conditioner essentially as claimed, including, for example: a housing or casing 202 including three chambers; a first heat exchanger or evaporator 207 located in the first chamber, the first chamber being configured to pass a first air flow in a first direction; a second heat exchanger or heater 208 located in the second chamber, the second chamber being configured to pass a second air flow in a second direction; a third chamber being configured to receive heat exchanged air from each of the first and second chambers; a partition member or slide door unit 209 having first and second openings 228A and 228B; and, a slidable slide door or slide door plate 221 slidable along a portion (i.e., door frame 220) of the partition member or slide door unit 209, the door or door plate 221 and the partition member portion or frame 220 describing substantially circular and concentric curves.

The reference thus reads on the claims.

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Allowable Subject Matter

10. Claims 1 through 6 are allowed.

11. Claims 14, 19, and 20 would be allowable if rewritten, without significant broadening, to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

12. The following additional prior art made of record and not relied upon is considered pertinent to applicant's disclosure. *Takenaka et al.*, *Ruger et al.*, *Kawai et al.*, *Sano*, *Gilles*, and *Tsurushima et al.* each discloses a vehicular air conditioner including interior partitions forming distinct chambers therein.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ljiljana (Lil) V. Ciric, whose telephone number is (703) 308-3925.

While she works a flexible schedule that varies from day to day and from week to week, Examiner Ciric may generally be reached at the Office during the work week between the hours of 10 a.m. and 6 p.m. ET.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel, can be reached on (703) 308-1272.

The NEW central official fax phone number is (703) 872-9306.

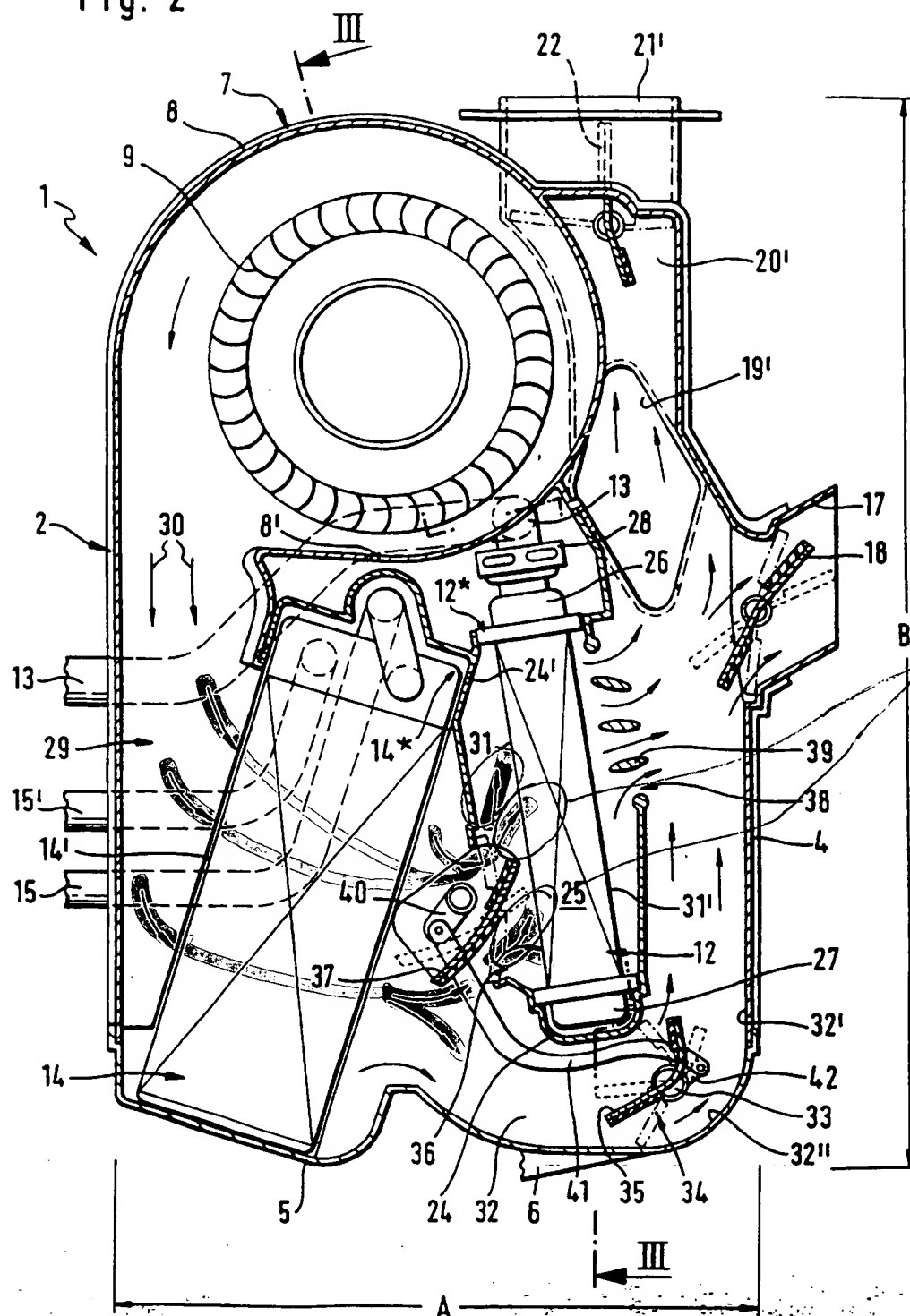
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.

lvc

December 31, 2003


LJILJANA V. CIRIC
PRIMARY EXAMINER
ART UNIT 3753

• Fig. 2



at least
these
airflows
are
substantially
perpendicular
to the ones
through
the first
heat
exchanger
14

ATTACHMENT A